clastic rocks such as are characteristic of the late Middle and Upper Keweenawan rocks. Normal faults associated with the rift basin appear to dip at moderate angles to the east. Palinspastic reconstruction indicates that the rift basin formed by the rotation of fault bounded crustal blocks during extension. Mafic intrusions are inferred to be emplaced beneath the rift basin on the basis of seismic character, seismic velocity distribution, and gravity modeling. The Michigan data exhibit a similar layered seismic character but structural details are less distinct. Asymmetric, well-layered reflector sequences are also evident in COCORP data from the Tertiary Rio Grande rift in New Mexico and from a Triassic graben in southeast Georgia, suggesting that such distinctive sequences are characteristic, and perhaps diagnostic, of rifts in general.

SEISMICITY ALONG THE PACIFIC-NORTH AMERICAN PLATE BOUNDARY IN CALIFORNIA AND WESTERN NEVADA, 1980-81

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Beginning in 1980, the number and distribution of telemetered, high-gain seismic stations operated in California and western Nevada provided the capability for locating earthquakes of $M \geq 2.0$ occurring throughout the broadly-deforming Pacific-North American plate boundary from the Salton Trough to the Mendocino triple junction and as far inland as the western Great Basin. Four networks combine to provide this capability: (1) the 300-station Central California Network operated by the U.S. Geological Survey from Menlo Park, CA; (2) the 200-station Southern California Network operated jointly by the California Institute of Technology (CIT) and the U. S. Geological Survey from Pasadena, CA; (3) the 40-station Western Nevada-Eastern California Network operated by the University of Nevada from Reno, NV; and (4) the 55-station Southern Nevada Network operated by the U.S. Geological Survey from Golden, CO. The distribution of earthquake hypocenters located by this combination of networks for 1980 and 1981 brings into focus detailed seismicity patterns within the broad bands of earthquake activity that have persisted for 50 years or more based on locations of $M \geq 3$ earthquakes from the regional networks operated by CIT and the University of California, Berkeley, since the early 1930's. The precise focal parameters of $M \geq 2.0$ earthquakes afforded by these four telemetered networks provide critical constraints on the kinematics of seismogenic deformation of the western margin of the North American plate adjacent to the San Andreas transform-fault system.

POTENTIAL FOR LARGE EARTHQUAKES IN THE CENTRAL NEVADA-EASTERN CALIFORNIA SEISMIC BELT

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Earthquakes in the range M=6.8-8 occurred in 1872, 1915, 1932, and 1954 in eastern California and western Nevada. These earthquakes were